VIRTUAL LEARNING JOURNEY
GEORGIA FORESTS
www.gpb.org/forests

STEAM CHALLENGE #2: Student Edition
Wood You Believe How Much We Need Trees!

PROJECT DESIGN: STUDENT LEARNING GUIDE			page 1
Project: Wood You Believe How Much We Get from Trees!			
Driving Question: How can we, as environmental scientists, help protect the forests in Georgia?			
Final Product(s) Presentations, Performances, Products and/or Services	**Learning Outcomes/Targets** knowledge, understanding & success skills needed by students to successfully complete products	**Checkpoints/Formative Assessments** to check for learning and ensure students are on track	**Instructional Strategies for All Learners** provided by teacher, other staff, experts; includes scaffolds, materials, lessons aligned to learning outcomes and formative assessments
(Individual/team) Research papers on why sustainability and conservation of forests are important to Georgia and its economy.	I can investigate my backyard (school grounds) and make interdisciplinary connections by applying art skills to enhance my learning of trees.	• Science journal • Art work	• In teams, students will take an in-house field trip to the school yard, collect various leaves, and use the Leafsnap app to identify trees in their community. • Record information on the tree using data from Leafsnap in science journal (habitat, growth habit, bloom time, longevity). • Using iPads or tablets, students will photograph each leaf and create a collage with labels using the Pic Collage app.
	I can generate questions about the importance and benefits of forestry.	• Science journal check	• Class discussion on conservation, sustainability, wood products, wood cellulose, economic advantages, working forests, and benefits to the environment. • Representative speaks to the class about the benefits of forestry and the importance of sustainability. Representative will answer students' questions. • Students will create a list of questions about what they would like to further research.
	I can organize my questions into topics of research.	• Science journal check	• ELA teachers will work with students on organizing their writing.
	I can create a digital portfolio for my research so that I can better organize my work for the final product.	• Digital portfolio check	• Technology integration specialist will work with students to set up a digital portfolio (Weebly, Wix, Google Site, OneNote, etc.) to organize ideas by topic for research.
	I can use research skills to read, comprehend, and formulate a report based on my questions.	• Science journal check	• Media center specialist will work with students on proper and research practices.

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	I can develop and strengthen my writing as needed by planning, revising, editing, rewriting, or typing my research topic for a specific purpose and audience.	• Observation of peer editing and giving feedback on aspects of their research. • Research report	• ELA teachers will work with students on organizing their writing.
	I can reflect on my work for this project.	• Self-Reflection on Project Work Rubric: • https://drive.google.com/file/d/1bOYx-o2YlIF7rDne4Y3TKz-jEKX8UM2Y9/view?usp=sharing •	• Review rubric and expectations • Upload rubric to digital portfolio
(Team) Research report and video presentation to environmental representative (i.e. Georgia Forest Foundation) or local business (i.e. Georgia Pacific)	I can use video editing tools or software (iMovie, SeeSaw, Educreations, iPad, green screen, etc.) to create a two-minute public service announcement video on the importance of Georgia's forestry including the economic and environmental benefits.	• Teacher will monitor the work of students and assist when necessary.	• Technology integration specialist will work with students on utilizing video editing tools or provide YouTube tutorials on the aspects of the various video editing software or apps that will be utilized by students.
	I can present my findings, sequence ideas logically and use pertinent descriptions, facts, and details to accentuate main ideas, use appropriate eye contact, adequate volume, and clear pronunciation	• Presentation Rubric for PBL • (for grades 6-8; Common Core ELA aligned) • https://drive.google.com/file/d/1nBBGaMXUcjwkeb11f-0WP89qb5mJc2KWa/view?usp=sharing	• Review presentation learning targets. • Design, organize, and rehearse presentations. • Observe and critique student presentations.